DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
SPECIFICATION

COMMON DIGITIZER - 2 (CD-2)

This specification change forms a part of FAA-E-2679a, dated June 22, 1982, as modified by Amendment 1, dated May 30, 1985; and Specification Change 1, dated January 28, 1986; and Specification Change 2, dated July 11, 1986.

Page 40, paragraph 3.4.2.1.6.1: Add the following to the end of the first paragraph, which ends "...or equivalent cable.":

"With prior Government approval, 75-ohm coaxial cabling may be used to connect these signals between the CD-2C equipment cabinet and the Military junction box, in lieu of cabling with a matching characteristic impedance.".

Page 40, paragraph 3.4.2.1.6.2: In subparagraph (a), change "+20 V min" to read "+16 V min", and change "0.2 us max" to read "0.3 us max".

In subparagraph (b), change "+20 V min" to read "+16 V min", and change "0.2 us max" to read "0.3 us max".

In subparagraph (c), change "+20 V min" to read "+16 V min", and change "0.2 us max" to read "0.3 us max".

Page 42, paragraph 3.4.2.1.6.4: Add the following to the end of the partial paragraph at the top of the page, which ends: "...simple internal means.":

The data, clock and alarm signals for the USAF's receive and transmit modems shall terminate in terminal strips in the Military junction box or, for CD-2C data-tie sites only, in the common junction box. Terminals which would otherwise be spares may be used for these signals provided that any incorrect labels resulting from such usage are replaced by appropriate labeling of the terminals and the (now spare) BNC jacks.".

Page 81, paragraph 3.4.3.1.4.1: Add the following immediately after the fourth sentence, which ends "...time (less than 0.1 second delay).":

"The CD-2C's AIMS ppi videos shall be displayed with range errors of eight miles or less.".

Page 86, paragraph 3.4.3.1.4.1.2.1(m): Delete the second sentence and the table which follows it, and substitute the following therefor:

"It shall be displayed at zero azimuth and at a range that places it near the top of the display, without regard to the display's range setting.".

Page 97, paragraph 3.4.3.1.5.2: Add the following immediately before the last sentence of the paragraph, which begins "The remaining video output circuits...":

"Any range error in the gated target video caused by processing delays in the STE shall be constant for a given CD-2 site adaptation, and shall in no instance exceed four miles when measured relative to the USAF ppi zero range trigger.".

Page 99, paragraph 3.4.3.1.5.3.3.1: In the tenth line, change "...the LSB shall be 400 feet (122 m)." to read "...the LSB shall be 100 feet (30.5 m).".

Page 104, paragraph 3.4.3.1.5.4.1.2: In the 15th line, change "...each message transmitted to the data..." to read "...each AIMS and height message transmitted to the data...".

Page 106, paragraph 3.4.3.1.5.4.1.3: Change the next-to-the-last sentence (which ends "...specified for the CIM in 3.4.3.1.3.3.3.") to read in part as follows:

"...specified for the CIM in 3.4.3.1.3.3.3, except that the modem data need not be evenly split between the available output channels.".

CHANGE 3

Page 199, Table IIIb: Change the amplitude of the AIMS Test Target Pulse from "+20 to +40 V" to "+18 to +40 V".

Change the fall time of the Range Sync Pulse from "0.1 us max" to "0.3 us max".

Change the pulse width for the Request Message Shift from "20 to 200 us" to "20 to 836 us".

Change the pulse width for the Request Message Data from "20 to 200 us" to
"20 to 836 us".

Change the pulse width for the Request Message End from "20 to 200 us" to
"20 to 836 us".

Page 201, Table V: Change the amplitude of the Beam Intensity signal from "zero to +90 V, positive pulse" to read "zero to +60 V, positive pulse".

Change the amplitude of the Range Trigger signal from "+30 V (min), positive pulse" to read "+27 V (min), positive pulse".

In the fourth line of Note (1), change "...zero to +90..." to read "...zero to +60...".

In the sixth line of Note (1), change "...zero to +30 volts..." to read "...zero to +22 volts...".

Page 204, Table VIII: For bit 19, change the entry for Condition Which Sets The Bit from "The GPA-124 alarm" to the following:

"The GPA-124 alarm or an AIMS processor bus failure alarm".

For bit 24, change the entry for Condition Which Sets The Bit from "Either the request line parity alarm or the request line failure alarm in the MIG" to the following:

"The request line parity alarm, the request line failure alarm, or any MIG height failure or alarm".

For bit 28, change the entry for Condition Which Sets The Bit from "AIMS azimuth, range or pretrigger alarms; MIG buffer overload alarm; or MIG half-scan inhibit alarm" to the following:

"MIG buffer overload alarm; MIG half-scan inhibit alarm; or any other MIG alarm not reported elsewhere in the status message".

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